

## Executive summary: AI's big leaps in 2025

Frédérique Carrier – London

Artificial intelligence is seldom out of the headlines in 2025, with defining developments coming one after another. We look at where AI is today and how its promise is matched against technological, economic, and geopolitical challenges.

*The following is an executive summary of the recent Global Insight [focus article](#) published as part of RBC Wealth Management's "Innovations" series.*

### Chinese AI enters the stage... with a bang

On Jan. 29, 2025, a little-known Chinese tech company, DeepSeek, released an AI model, R1, that shook the industry. R1's cutting-edge capabilities make it seemingly as good a model as those created by U.S. leader OpenAI, the maker of ChatGPT. But what unsettled the industry most was its shoestring development cost—just \$6 million, a fraction of what comparable U.S. models required. Adding to the excitement, DeepSeek-R1 was released as an open-source model—i.e., publicly available at no cost.

With this, China gained an unexpected competitive edge, as the R1 model could spread and be adapted far more widely and cheaply than those of its Western rivals. This shook the U.S. tech ecosystem to its core, as until then, it had been confident in its position as the world's leading AI force.

China's AI achievements go far beyond a single company thanks to its millions of engineers and scientists that graduate from Chinese universities every year, its spare grid capacity necessary to run the power-hungry AI models, and its permissive planning laws that allow data centers to be built swiftly.

### America's response

The China-U.S. technology rivalry has been ongoing for years, as both countries see AI dominance as key to geopolitical influence and military advantage.

In 2025, the White House initiatives to secure an edge in the AI race included releasing its AI Action Plan in July and changing chip export restrictions to China.

### Winning the race: America's AI Action Plan

The White House issued its AI Action Plan in July 2025. The Plan is built on three core pillars: accelerating innovation, expanding data center infrastructure, and promoting American technology abroad.

According to the Brookings Institution, an American think tank, the plan can be lauded for focusing on advancing and democratizing basic and applied AI research, and addressing the need to develop an AI-ready workforce.

### Export controls: Chips as a geopolitical weapon?

The Trump administration is also using export controls, a strategy used in Donald Trump's first term and followed up by former President Joe Biden to respond to the Chinese threat. This time, however, the controls have sent confusing signals.

For perspectives on the week from our regional analysts, please see [pages 3–5](#).

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Priced (in USD) as of 10/15/25 market close (unless otherwise stated). Produced: 10/16/25, 17:20 ET; Disseminated: 10/16/25, 17:30 ET

In April 2025, the Trump administration banned exports of NVIDIA's H20 chips to China over concerns the technology could strengthen Beijing's defense industry (H20 chips had been developed two years earlier by NVIDIA to comply with export restrictions). The ban was then lifted in July. A few weeks later, Washington announced that NVIDIA and Advanced Micro Devices would be granted export licenses to sell specific chips to China so long as they shared 15 percent of their revenue from these chip sales with the U.S. government.

The policy U-turn points to the difficulty of calibrating the security and economic interests of the U.S.

### New sources of financing

Another key AI development in 2025 has been the shift in funding sources for the substantial investment needed to build the infrastructure to support AI models.

According to McKinsey, a consulting company, global data centers will need between \$3.7 trillion and \$5.2 trillion by 2030 to meet demand for AI computing power, including hardware, processors, memory, storage, and energy.

Much of this will be shouldered by Big Tech companies that are building large data centers to support their cloud services and AI initiatives. Traditionally, they often preferred to self-fund these investments. But financing requirements are so large that companies are turning to different sources of funding.

Investment-grade borrowing by U.S. tech firms was up 70 percent year over year in the first half of 2025, according to Bloomberg. Debt securitization is also growing, whereby data center-related borrowing is pooled and sold to investors in tranches, much like mortgages are. Finally, private capital is playing an important role too.

Data center lending and investing carry additional risks beyond cost overruns. Overcapacity from rapid capital investment can leave assets underutilized while technology risk is also substantial.

Hyperscalers are diversified enough to weather these challenges, in our view, though they now carry substantial infrastructure and capital commitments—they are no longer asset-light. We believe smaller investors and lenders will need to be particularly vigilant.

### Superintelligence around the corner?

Some observers are optimistic that progress in AI will be swift, raising hopes that Artificial General Intelligence (an AI model with human-like cognitive abilities) and even Artificial Superintelligence (an AI model with an intellectual scope beyond human intelligence) could be achieved within their lifetimes.

Such enthusiasm is understandable as the pace of AI progress has been remarkable.

Yet others guard against too much enthusiasm. Rodney Brooks, robotics pioneer and former director of the MIT Computer Science and Artificial Intelligence Laboratory, emphasizes that while AI models can use language fluidly, they are essentially pattern recognizers, really good at spotting and repeating patterns in data. That, in his view, is not the same as truly understanding or thinking for themselves.

He believes change will come more slowly than is generally expected because rolling out new technology almost always runs into practical hurdles like cost, integration with other systems, regulation, and the need of human oversight—as AI systems are far from being plug-and-play as the hype often suggests. Finally, he emphasized that corporate adoption of the new technology will be based on return on investment.

On that front, a July 2025 report from the Massachusetts Institute of Technology revealed that 95 percent of generative AI (GenAI) pilot programs in enterprises yielded no measurable return on investment.

### Promise ...and challenges?

2025 has been a pivotal year for the AI industry, and 2026 will likely be as eventful. Though new developments will likely keep enthusiasm high, we believe investors should also keep on eye on whether such investments and the application of AI in business are generating adequate returns. As has almost always been the case in the past, the risk remains that investors may overestimate what the new technology can deliver in the short to medium term.

*For in-depth information, please review the full Global Insight focus article: [AI's big leaps in 2025](#).*

## UNITED STATES

Alan Robinson – Seattle

■ **U.S. stock indexes recovered during the week, regaining most of the losses incurred in a significant one-day selloff on Friday, Oct. 10.** Investors were encouraged by an apparent Trump administration U-turn on the harsh tariff rhetoric directed at China that appeared to trigger the Friday swoon. A positive start to Q3 2025 earnings season provided a further tailwind. We take a closer look at the context and implications of the jarring, if fleeting, decline below.

■ **The large U.S. banks kicked off earnings season with positive results.** JPMorgan Chase (JPM), Goldman Sachs (GS), and Morgan Stanley (MS) all flagged better-than-expected capital markets and investment banking business, with guidance implying more to come. Management mentioned a resilient consumer sector as a common theme. However, they also warned that the “K-shaped” recovery bore watching, as higher-end consumer spending ratcheted higher even as lower-end consumers tightened their belts. To that point, JPMorgan CEO Jamie Dimon voiced concern about the recent bankruptcy of Tricolor, a subprime auto dealer and lender, warning that “when you see one cockroach, there’s probably more.”

■ **AI sentiment remained bullish during the week,** with semiconductor manufacturer TSMC (TSM) and enterprise software vendor Salesforce Inc. (CRM) providing solid results and strong guidance. TSMC management said its conviction in the “AI megatrend” is strengthening and suggested that AI demand through 2029 could grow faster than 40% annually.

■ **The government shutdown continued into its third week,** preventing the release of important economic data on employment and inflation. This prompted market watchers to pay greater attention than usual to Fed speakers during the week. Views on interest rate policy ranged from dovish members potentially angling to replace Fed Chair Jerome Powell next year, to those more concerned about the inflationary impacts of tariffs.

■ **The Fed’s latest Beige Book** noted economic activity changed little since the previous report. Three districts reported slight to modest growth, five reported no change, and four noted a slight softening. Prices rose further as several districts reported that input costs increased at a faster pace due to higher import costs.

■ **Was the Oct. 10 stock market fall business as usual, or a warning of things to come?** While angst over last Friday’s fall appears to have faded, we think it’s worth taking a closer look at the market landscape, given the extent of the post-COVID equity bull market. The proximate cause of the selloff was a statement by President Trump threatening additional tariffs of 100% on Chinese imports as a response to China’s unexpected

## Incidence of one-day S&amp;P 500 losses

On average, how many days each year incur losses within the following ranges

< -4%	-4% to -3%	-3% to -2%	-2% to -1%	-1% to 0%	Total down days
1	2	7	23	83	116 (46%)

## Incidence of one-day S&amp;P 500 gains

On average, how many days each year produce gains within the following ranges

0% to 1%	1% to 2%	2% to 3%	3% to 4%	> 4%	Total up days
99	28	6	2	2	135 (54%)

Note: Based on an annual average of 251 trading days.

Source - RBC Wealth Management, FactSet; daily percentage returns of the S&P 500 over the past 30 years

tightening of export controls on rare earth elements. This increase in trade tensions echoed the market upheaval of April 2025, and the 2.7% drop in the S&P 500 Index on Oct. 10 was the largest one-day drop in six months.

■ **Are drops of this magnitude unusual?** Not really. In any given year, investors should expect seven one-day falls of between 2%–3% (see table above).

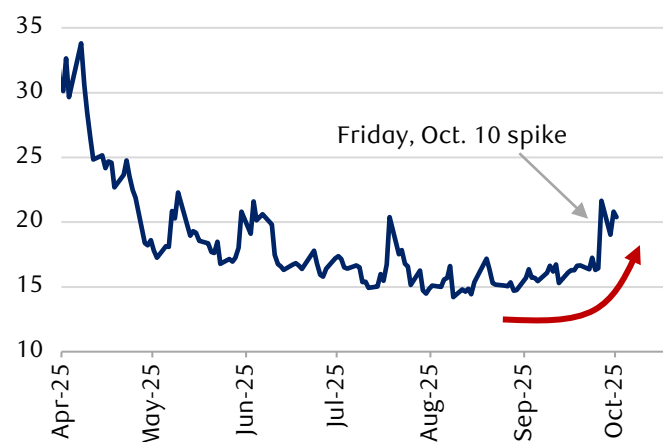
■ **More often than not, these falls are followed by relief rallies that typically make up the bulk of the previous day’s losses, as we saw this week.** Academic research has failed to glean any signals from these falls that might offer a way to “beat the market.” We maintain that “time in” the market is a better way to secure long-term returns than “timing” the market.

■ **But investors should also consider the context of these one-day moves.** Since the market closed at its low point of Oct. 13, 2022, the S&P 500 Index has gained over 80%, equivalent to average annual compounded gains of 22%. This is considerably higher than the high-single-digit annual gains history tells us to expect. Furthermore, the recent fall occurred against a backdrop of slowly increasing market volatility, with the rising VIX indicator (aka the “fear gauge”) flagging increasing nervousness (see chart on next page).

■ **If the Oct. 10 drawdown presages the start of something more than a run-of-the-mill correction, we think there will have to be some serious deterioration in the earnings outlook for the U.S. stock market.** Consensus estimates for the S&P 500 earnings this year and next are \$270 (+9% y/y) and \$305 (+13% y/y). However, **earnings estimate revisions have weakened recently for companies outside the AI cohort.** These technology sector earnings estimates remain buoyant, but any slippage in management outlooks showing up in Q3 reports could usher in a more challenging market retrenchment.

## Spikes in the “Fear Index” are common; the trend may be more important

CBOE Volatility Index (VIX)



Source - RBC Wealth Management, FactSet; daily closing levels 4/15/25–10/15/25

■ This is not intended to sound a warning bell after three years of solid gains, but it does serve as **a good reminder for investors to rebalance portfolios back toward their target allocations across themes and sectors** in order to best meet their long-term investment goals.

### CANADA

Nguyen Dang, CFA & Lindsay Puls – Toronto

■ **Canada’s labour market surprised to the upside in September with a net addition of 60,400 jobs, almost fully reversing the August losses, while the unemployment rate held steady at 7.1%.** Despite the strong headline numbers, underlying momentum continues to moderate. So far in 2025, the economy has added an average of 24,000 jobs per month, roughly 10,000 fewer than the pace seen over the previous two years. The slowdown is likely attributable in part to the drag from U.S. tariffs, which have forced some firms to cut staff or rethink hiring plans altogether, particularly in trade-exposed sectors. Labour market softness is most pronounced among younger workers, with the 15–24 age group’s unemployment rate climbing to 14.7%, the highest level in 15 years, raising concerns about future labour force participation and wage growth. Against this backdrop, markets are pricing in a roughly 50/50 chance of a Bank of Canada interest rate cut in October. Further easing beyond October would likely face greater scrutiny following the release of federal deficit spending information expected in the November budget, which is generally viewed by policymakers and markets as a better tool with which to combat tariff-induced weakness in pockets of the economy.

■ **Canadian manufacturing sales and wholesale trade dropped in August.** Manufacturing sales fell 1.0% to a seasonally adjusted CA\$69.4 billion, the first decline in three months, after rising 2.2% in July. Statistics Canada saw manufacturing sales fall in 12 of the 21 subsectors, though the 1.0% drop is still better than the consensus expectation of a 1.5% decline. Transportation equipment declined 5.7% in August after rising 7.7% in July, driven by lower sales in aerospace products and parts (-8.6%), motor vehicles (-3.3%), and parts (-5.2%). Regionally, trade-exposed provinces saw the biggest declines, with Quebec down 1.6% and Ontario falling 0.8%. Additionally, wholesale sales (excluding petroleum and grains) also fell 1.2% in August, with motor vehicles & parts dropping 8.8% and the food, beverage & tobacco subsector down 3.8%. As with manufacturing sales, trade-exposed provinces saw the biggest declines, with Ontario down 2.4% and Quebec down 1.0%. Statistics Canada attributes the decline in motor vehicle goods to seasonal factors and U.S. tariffs.

### EUROPE

Frédérique Carrier & Thomas McGarrity, CFA – London

■ **Luxury goods giant LVMH reported stronger Q3 results than expected by consensus.** The luxury sector has recently experienced a prolonged slowdown after several years of strong growth, when consumers were spending excess savings and brands were raising prices amid inflation. **With the company having reported an organic decline in group sales in Q1 and Q2 this year as consumers held back purchases, consensus estimates had expected Q3 organic revenue to contract 0.7%; however, LVMH reported organic growth of 1%, which sent its shares up more than 13% on Oct. 15.** The company noted an improvement across most of its business groups and regions, with Asia (ex Japan) seeing a “noticeable improvement in trends” versus 2024. The share prices of other luxury goods companies, such as Richemont and Kering, also bounced back strongly (6%–10%), on signs that the worst is perhaps now over for the industry.

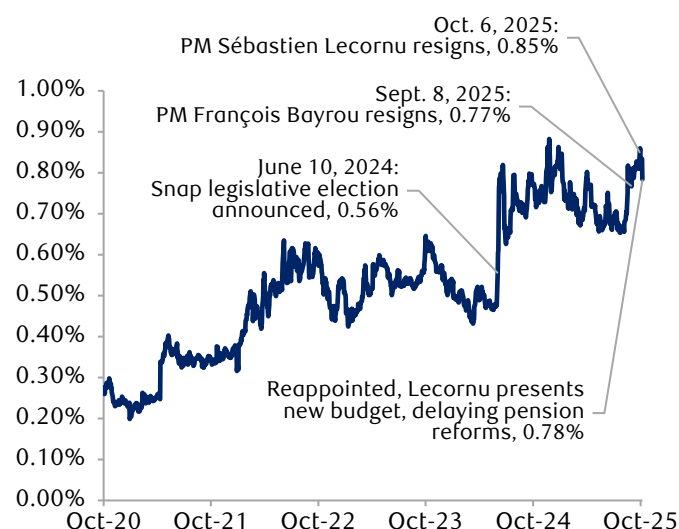
■ **The day after announcing Q3 results, ASML’s shares rose around 3%. The company reported Q3 orders of €5.4B, beating the consensus expectation of €4.89B.** Notably, €3.6B of these orders were for its leading-edge extreme ultraviolet (EUV) lithography equipment. Management noted continued positive momentum driven by its customers’ investments in AI-related technology, leading-edge logic, and advanced DRAM (dynamic random access memory).

■ In France, President Emmanuel Macron reappointed Sébastien Lecornu as prime minister just five days after his resignation, which had followed the National Assembly's rejection of his austere budget. On Oct. 14, Lecornu presented a new budget to parliament, which delays the planned pension reforms—Macron's flagship policy—until after the 2027 presidential elections. This move secured the support of the Socialist Party, which we believe is key to the government surviving further votes of no confidence. As a result, the pension age will remain at 62 years and nine months, with the associated costs offset by additional savings—although these measures are unclear. Parliament now has 70 days to debate the budget.

■ Though the fiscal situation is unlikely to improve, in our view, **markets are focusing on the political crisis easing**. The spread of 10-year French government bonds to German government bonds narrowed somewhat.

### French government bond spreads still near 5-year highs

10-year bond differential between France and Germany



Source - RBC Wealth Management, Bloomberg

## ASIA-PACIFIC

Nicholas Gwee, CFA – Singapore

■ On Oct. 9, China's Ministry of Commerce announced it would implement further export controls on 12 rare earth minerals and related upstream/downstream products such as batteries and related technologies. Rare earths are critical materials for the semiconductor manufacturing supply chain. The Trump administration retaliated by announcing an additional 100% tariff on Chinese goods effective Nov. 1. The escalation in trade tensions sent the MSCI Asia Pacific Index tumbling for three consecutive days before finding its footing on Wednesday. As of this writing, neither country has ruled out a face-to-face meeting between Donald Trump and China's President Xi Jinping at the APEC summit that starts later this month. We think China is increasing its leverage ahead of the high-level official meeting. At the same time, we also think there is room for de-escalation and a potential truce in the coming weeks to avoid the 100% tariffs on Chinese goods, though risks of further tit-for-tat fees remain.

■ In Japan, the race to become the next prime minister continues. The incumbent coalition government collapsed after the Komeito party withdrew from its longstanding alliance with the Liberal Democratic Party (LDP). According to a Bloomberg report, the Japan Innovation Party is looking to partner with the LDP in a move that we think would set Sanae Takaichi, the LDP's first female leader, on the path to becoming Japan's first female prime minister. Such a partnership would give the LDP an additional 35 seats in the lower house—two shy of a majority, but well ahead of any opposition bloc. Meanwhile, the fragmented opposition parties are uniting behind a common candidate for prime minister: Yuichiro Tamaki of the Democratic Party for the People. We think equity markets generally prefer Takaichi given her expansionary fiscal plans.



## MARKET Scorecard

Equity returns do not include dividends, except for the Brazilian Ibovespa. Bond yields in local currencies. Copper Index data and U.S. fixed income returns as of Tuesday's close. Dollar Index measures USD vs. six major currencies. Currency rates reflect market convention (CAD/USD is the exception). Currency returns quoted in terms of the first currency in each pairing.

Examples of how to interpret currency data: CAD/USD 0.71 means 1 Canadian dollar will buy 0.71 U.S. dollar. CAD/USD 2.4% return means the Canadian dollar has risen 2.4% vs. the U.S. dollar year to date. USD/JPY 151.20 means 1 U.S. dollar will buy 151.20 yen. USD/JPY -3.8% return means the U.S. dollar has fallen 3.8% vs. the yen year to date.

Source - Bloomberg; data as of 10/15/25

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	6,671.06	-0.3%	13.4%	14.7%	54.1%
Dow Industrials (DJIA)	46,253.31	-0.3%	8.7%	8.2%	37.4%
Nasdaq	22,670.08	0.0%	17.4%	23.8%	69.1%
Russell 2000	2,519.75	3.4%	13.0%	12.0%	46.5%
S&P/TSX Comp	30,637.12	2.0%	23.9%	25.4%	57.4%
FTSE All-Share	5,097.10	0.7%	14.1%	13.0%	24.5%
STOXX Europe 600	567.77	1.7%	11.8%	9.1%	26.4%
EURO STOXX 50	5,605.03	1.4%	14.5%	13.3%	35.5%
Hang Seng	25,910.60	-3.5%	29.2%	27.5%	45.5%
Shanghai Comp	3,912.21	0.8%	16.7%	22.2%	26.7%
Nikkei 225	47,672.67	6.1%	19.5%	19.4%	47.5%
India Sensex	82,605.43	2.9%	5.7%	1.0%	24.6%
Singapore Straits Times	4,368.42	1.6%	15.3%	21.5%	37.1%
Brazil Ibovespa	142,603.66	-2.5%	18.6%	8.8%	23.2%
Mexican Bolsa IPC	61,562.71	-2.2%	24.3%	17.5%	24.7%
Gov't bonds (bps change)	Yield	MTD	YTD	1 yr	2 yr
U.S. 10-Yr Treasury	4.030%	-12.0	-53.9	-0.2	-58.2
Canada 10-Yr	3.123%	-6.0	-10.2	-2.2	-84.7
UK 10-Yr	4.543%	-15.6	-2.5	38.1	15.7
Germany 10-Yr	2.571%	-14.0	20.4	34.9	-16.6
Fixed income (returns)	Yield	MTD	YTD	1 yr	2 yr
U.S. Aggregate	4.25%	0.9%	7.0%	5.0%	16.0%
U.S. Investment-Grade Corp	4.73%	0.8%	7.7%	5.3%	19.6%
U.S. High-Yield Corp	6.88%	-0.4%	6.8%	7.3%	24.7%
Commodities (USD)	Price	MTD	YTD	1 yr	2 yr
Gold (spot \$/oz)	4,208.25	9.1%	60.3%	58.1%	117.7%
Silver (spot \$/oz)	52.99	13.6%	83.4%	68.2%	133.2%
Copper (\$/metric ton)	10,632.87	4.0%	22.9%	13.3%	35.0%
Oil (WTI spot \$/bbl)	58.67	-5.9%	-18.2%	-16.9%	-33.1%
Oil (Brent spot \$/bbl)	62.35	-7.0%	-16.5%	-16.0%	-31.4%
Natural Gas (\$/mmBtu)	3.03	-8.2%	-16.5%	21.4%	-6.3%
Currencies	Rate	MTD	YTD	1 yr	2 yr
U.S. Dollar Index	98.6900	0.9%	-9.0%	-4.4%	-7.5%
CAD/USD	0.7120	-0.9%	2.4%	-1.9%	-2.7%
USD/CAD	1.4046	0.9%	-2.3%	2.0%	2.8%
EUR/USD	1.1646	-0.7%	12.5%	6.9%	10.8%
GBP/USD	1.3398	-0.4%	7.0%	2.5%	10.3%
AUD/USD	0.6510	-1.6%	5.2%	-2.9%	3.4%
USD/JPY	151.2000	2.2%	-3.8%	1.3%	1.1%
EUR/JPY	176.0800	1.5%	8.2%	8.3%	12.0%
EUR/GBP	0.8692	-0.4%	5.0%	4.3%	0.5%
EUR/CHF	0.9280	-0.7%	-1.3%	-1.2%	-2.1%
USD/SGD	1.2958	0.4%	-5.1%	-1.0%	-5.4%
USD/CNY	7.1270	0.1%	-2.4%	0.1%	-2.4%
USD/MXN	18.4688	0.9%	-11.3%	-6.2%	2.1%
USD/BRL	5.4570	2.5%	-11.7%	-3.5%	7.5%

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As of September 30, 2025

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			Count	Percent
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